

Application No.: 09/733868

Docket No.: INQ-001RCE

REMARKS

Claims 1-10, 13-23, 26-27, 30-36 and 39-46 are pending. Claims 1, 14, 27, 41, 43, 45 and 46 are independent claims.

Rejection of Claims Under 35 U.S.C. §103(a)

All of the claims were rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Lupo (United States Patent Number 6, 477, 642, hereafter "Lupo") in view of Cloney et al (United States Patent No.: 6, 791, 572, hereafter "Cloney") (some of the dependent claim rejections are based on Lupo alone but require the combination of Lupo in view of Cloney for the underlying independent claim). For the reasons set forth below, Applicants respectfully traverse these rejections.

Summary of Claimed Invention

The claimed invention provides a method for the displaying of content to a user either during both a part of the BIOS POST (Basic Input Output System Power On Self Test) and during at least part of a created time interval after the completion of the BIOS POST but prior to the loading of an operating system (claims 1 and 45 and their dependents), following the BIOS POST during a created time interval prior to the loading of the operating system (claims 14, and 46 and their dependents) and prior to operating system loading during a created time interval (claims 27 and 41 and their dependents) for those electronic devices that load an operating system without performing a POST. The method enables the content to be updated automatically following the loading of the operating system or in response to a user request, depending upon the implementation of the invention. The updated content may originate from a remote or local location and is transferred to a persistent storage medium capable of being accessed prior to the loading of the operating system. The persistent storage medium is separate from the medium holding the BIOS. The method further enables the updating process to be conducted in a non-intrusive manner so as not to disturb other processes running on the computer system or electronic device. Additional embodiments of the present invention enable

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the display of content to a user to take place in an interactive format prior to operating system loading.

Summary of Lupo

Lupo describes a method of extending BIOS control of a display screen beyond the beginning of the loading of the operating system. During a POST operation, the BIOS writes content to the display screen, redirects a video controller interrupt vector to a new handler and traps I/O accesses to the video controller. The video controller interrupt vector that is redirected is usually used by the operating system to control the display. As a result of the redirection, the BIOS may be used to write content to the display during the entirety of the operating system loading process. Once the operating system has finished loading, the original interrupt vector is restored and the operating system takes control of the display. Lupo does not disclose the creation of a time interval between the completion of a POST and the commencement of the loading of an operating system.

Summary of Cloney

Cloney discusses a method of generating media output during BIOS boot-up. The method displays retrieved values representative of device parameters. A template corresponding to a graphic object is retrieved and a graphic attribute that characterizes the graphic object is generated from the template. The first and second values and an image generated using the graphic attribute are then displayed. Cloney does not disclose the creation of a time interval between the completion of a POST and the commencement of the loading of an operating system.

Argument

The Examiner cited Lupo as teaching or suggesting all of the elements of Applicants' claims with the exception of the limitation that at least part of the display occurs during a created time interval between the completion of the POST and the commencement of the operating system (or prior to operating system loading for those devices lacking a POST process). The

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Examiner admitted that Lupo did not teach or suggest the creation of the time interval limitation but suggested that the missing limitation could be found in Cloney. Applicants respectfully disagree that the missing limitation may be found in Cloney for the reasons set forth below.

At the outset, Applicants respectfully suggest that Cloney is not a valid prior art reference that may be cited against Applicants' claimed invention. The Applicants' utility application was filed on December 8, 2000 and claims the benefit of a United States provisional application (application number 60/169, 551) filed on December 8, 1999. Cloney was filed on December 10, 1999 two days after Applicants' priority date of December 8, 1999. While Cloney is a continuation-in-part of an earlier filed application (Application No. 09/458, 613, filed June 18, 1999), the parent application has not been cited against Applicants' claimed invention. If it is the Examiner's position that material rendering the Applicants claimed invention obvious is found in the parent application, Applicants respectfully request that the Examiner provide citations to the material in the parent case for the rejections. Applicants also request a copy of the parent application as it appears not to have resulted in an issued patent or to have been published as of this date. If the Examiner is not asserting the parent application, Applicants request the withdrawal of all of the pending rejections as Applicants' priority date is prior to the filing date of Cloney.

Notwithstanding the above, Applicants respectfully assert that the limitations missing from Lupo are also missing from Cloney as Cloney fails to disclose the affirmative creation of a time interval following the BIOS POST and before operating system loading. All of Applicants' independent claims require the creation of a time interval as part of the invention. The affirmative creation of the time interval provides greater flexibility for the display of content to a user. Applicants respectfully suggest that Cloney does not teach or suggest the affirmative creation of a time interval for the purpose of displaying content to a user.

The Examiner cited Figure 4B and col. 11, lines 25-34 as providing support for the position that Cloney teaches the displaying of information during a time interval between the end of the POST and the commencement of the loading of the operating system (see page 3, second full paragraph of Office Action dated March 21, 2005). Applicants respectfully disagree with

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the contention that Cloney indicates either the display of content during a time interval subsequent to POST and prior to operating system loading or the creation of such a time interval. Neither Figure 4B or the cited description in column 11 discuss the required "creation of a time interval" limitation. Furthermore, the timing of the display of content taking place in Figure 4B is not identifiable by an examination of the Figure and an examination of the specification argues against the position taken by the Examiner.

Figure 4B shows a second or subsequent boot of a system (the initial boot of the system is depicted in Figure 4A). Figure 4B shows a time interval prior to the loading and executing of the operating system occurring at "T2" in the figure. However, as there is no description for the figure labels in the specification it is impossible to say whether the display is taking place during or after POST (POST has clearly started at "T0", but whether the POST has completed or not by T1 is unclear from the figure and argued against by the specification).

The description of the similar timeline in Figure 4A of Cloney in column 9 would seem to indicate that the POST operation in Figure 4B is still ongoing when the payload is displayed. Figure 4A shows a timeline beginning at "T0" with "POST" in the interval (T0-T1) prior to the second time marker. The second interval (T1-T2) has the label "emplacement of initial start up application", and the third interval (T2-T3) reads "O/S loaded and executed". The description accompanying Figure 4A indicates that the emplacement of the initial start up application occurs during POST ("During the initial POST, the ISUA 86 is transferred to the mass storage device", see col. 9, lines 22-24) despite the fact it is separately marked as the second interval (T1-T2). As the first (T0-T1) and third intervals (T2-T3) depicted in Figures 4A and 4B are identical it would appear to make sense that the display depicted in the second interval (T1-T2) and cited by the Examiner in Figure 4B is taking place during POST just as the emplacement of the initial start up application in the T1-T2 interval took place during POST in Figure 4A. Additionally, the example discussed in column 10 is consistent with the display taking place during rather than after POST. Column 10, lines 5-7 read "graphical content of the initial payload 88a is displayed by a display engine during POST [emphasis added]." Lines 7-14 discuss an alternative embodiment where the user is queried based on a user profile and the initial payload is displayed after a subsequent booting of the system based on the user response but does not indicate the presence or creation of a separate time interval. Similarly, see col. 10, lines 15-16, "Once POST

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is completed, the OS is loaded, executed and initialized." No mention is made of the presence or creation of an intervening time interval in which content is displayed to a user. Furthermore, the Examiner cited col. 11, lines 25-34 as teaching a time interval. However, the cited section merely indicates that during a subsequent booting process, the POST is performed and the content is displayed prior to loading and/or execution of the operating system. No mention is made of display of content during a separate time interval after POST nor is any mention made of the creation of the time interval claimed by Applicants.

Applicants' claims require the affirmative creation of a time interval that is simply not taught or suggested by Cloney. As noted above, Applicants' independent claims 1 and 45 require the display of selected content during at least part of the POST and part of the created time interval. Applicants' independent claims 14 and 46 require the display of the selected content during the created time interval following POST. Applicants' independent claims 27 and 41 require the display of content during the created time interval prior to operating system loading(without referring to POST). Since Cloney fails to teach or suggest the existence of the time interval much less its affirmative creation, the combination of Lupo in view of Cloney fails to teach or suggest all of Applicants claim limitations. Accordingly, Applicants respectfully request the withdrawal of all pending rejections and allowance of the claims.

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CONCLUSION

For the reasons set forth above, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. INQ-001RCE from which the undersigned is authorized to draw.

Dated: June 21, 2005

Respectfully submitted,

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